

# THE MEDICAL EXAMINER.

DEVOTED TO MEDICINE, SURGERY, AND THE COLLATERAL SCIENCES.

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[VOL. I.

## RHEUMATISMUS, OR RHEUMATISM.

By N. CHAPMAN, M. D., *Professor of the Theory and Practice of Physic, in the University of Pennsylvania.*

(Concluded from page 140.)

Or the treatment of acute inflammatory rheumatism, much of what I should otherwise have had to say, has been anticipated, in that of gout. As to the disease in our own climate, at least, it will be right to commence the cure with copious venesection, which is pointedly called for, by the symptoms, and by the appearance of the blood, this being, perhaps, more inflammatory, than in any other affection. No substitute exists for the lancet in this case. The other remedies will be unproductive of utility, and never should be prescribed, till the intensity of action is overcome by direct depletion. It is my wish, to press this precept upon you strongly, since in most of the writers, you will find bleeding cautiously advised, and by some altogether interdicted, as nugatory in relation to the cure, calculated to lead to sudden translation of the disease to vital parts, or to run into the chronic state. These are the objections of theory or ignorance, and must not be listened to, for an instant. Bleeding here, when adequately urged, is nearly as effectual in arresting the attack, as in the other phlegmasiae, and, instead of promoting, has a contrary effect, as to the alleged metastasis. The instances of the kind, amounting to several, which have come under my notice, occurred where no blood had been lost. It is an error to suppose, that disease is invited to a part by the weakness of it, which seems to be the foundation of the dread of the remedy. The reverse is true, or it is attracted by a pre-existing phlogistic irritation, endowing it with an increased susceptibility, by the removal of which, and bleeding is the best means of doing it, the chance of its happening is diminished. By this mode, a sprain or other injury attracts it, and do we not find the same effect from irritating revulsives, as rubefacients, sinapisms, or blisters, exemplified, especially, in the operation of these applications in retrocedent or misplaced gout. Not less absurd is the supposition, that bleeding promotes the transmutation of the disease into the chronic state. It is a rule, to which rheumatism forms no exception, that, proportioned to the rapidity with which acute inflammations are reduced, and to this end, surely, the loss of blood is most efficient, is the security against such a result. Nor is any thing more certain to my mind, than that the tendency in the disease which has also been complained of by some, to cerebral disturbance and petechial eruptions, must be ascribed to the premature substitution of a stimulating and tonic, for the antiphlogistic course, and, especially, venesection.

But very differently is the process appreciated by the writers of nearly every country of Europe.

To so great an extent has this prejudice against bleeding been carried, by some of the British practitioners, especially, that even the Peruvian bark was substituted in its place! During my attendance in the London hospitals, the use of it was generally adopted, and, undoubtedly, it has received the sanction of several of the highest English authorities, for more than a century. By Morton, the contemporary of Sydenham, it was probably introduced, and claims, subsequently, the distinguished support of Heberden, Fothergill, Saunders, Baker, Fordyce, Haygarth, &c. It is really extraordinary to see the confidence with which the bark is spoken of by Haygarth, who, on the most ample experience with it, says: "Except mercury, in syphilis, there are few, and, perhaps, no examples, where a remedy produces such speedy relief, and perfect recovery, in so formidable a disease. For many years, I have been thoroughly convinced that the Peruvian bark has a much more powerful effect in the rheumatic, than in any other fever, and that it does not cure even an ague, so certainly, or so quickly."

Nor have the European practitioners become emancipated entirely from the thraldom of this error, even at the present moment. Elliotson and Johnson, two of the most conspicuous of the English, at least, seem to labor under it, and we are told that it universally continues with those of France.

That there is a very egregious fallacy in these statements, is obvious. Never did I perceive the least advantage, in any one case of the early stage of the disease, from the practice, and often, the most manifest mischief, in which sentiment, I am fully supported by the best authorities of our country. Yet, I shall presently show you, that, properly applied, the bark is valuable in this disease.

Nor is it to be supposed, from what I have said, that all the British writers concur in the proscription of bleeding, in rheumatism. This is very far from the fact, since, among others, it is strenuously recommended by Sydenham, Pringle, Cullen, Scudamore, &c.

It is very amusing to us, who have been so long and so thoroughly conversant with this practice, to listen to the ignorance or presumption of a late French writer, in preferring his pretensions to it as a discovery of his own. Bouillaud, whom I have previously cited, in a late publication, after harshly censuring Louis, Chomel, and others of his contemporaries, who, he says, pursue an opposite method, proclaims, in a burst of enthusiasm, the utility of blood-letting in the disease, as a revelation, for the first time, made to himself alone!

Next, the bowels ought to be freely evacuated, and the saline articles are mostly preferred for the purpose. But the combination of calcined magnesia, Epsom salts, and the tincture of colchicum, noticed formerly, is, according to my own experi-

enee, peculiarly well suited. It evacuates the bowels, adequately, and controls more effectually the rheumatic action. Yet purging by any article is here less serviceable than in the kindred arthritic affection, probably from rheumatism's not, like gout, primarily originating in a depravation of the alimentary canal. My remarks have reference to ordinary rheumatism. The case being modified by miasmatic influence, then, purging, and especially by calomel, proves exceedingly efficacious, and under all circumstances does good, on the principle of reducing vascular action, and febrile excitement, as well as by preparing the way for the efficient operation of other remedies.

Emetics, have also been directed in rheumatism. Excepting in the form of the disease justindicated, I have no knowledge of them, and must therefore, advance an opinion diffidently, in relation to their powers. The stomach is here much oppressed, and nauseated, and they prove serviceable in a mode, which I need not explain.

As somewhat confirmatory of their efficacy, the fact may be stated, that in this variety of the disease, whenever spontaneous vomiting takes place, there is for a time, a very marked mitigation of both the general and local affections.

Evacuations having been thus premised, the treatment, whatever may be the precise character of the case, is resolved into the use of the febrifuges. Combined in small portions with the nitrate of potash, and sometimes calomel, the tartarised antimony is greatly prescribed. By this preparation, vascular action is further subdued, or kept under, and, what is equally important, the skin may be restored to a more healthy condition.

It is at this conjunction, or even at an earlier period, that the contra-stimulant plan of the Italian school, consisting of immense doses of emetic tartar, is proposed. What was said of it in relation to pneumonic inflammation, is equally pertinent to the present disease, and I must be content to refer to the criticism on the practice delivered on that occasion.

Febrile excitement becoming further reduced, a recurrence is usually had to the more direct means of sweating. This is a mode of combating rheumatism, which has long been consecrated to the purpose, by the undivided opinions of every description of practitioners, and is too often abused. It is well ascertained, that sweating is always pernicious, if practised in the early or phlogistic stage. Even when it comes on spontaneously, it never, as previously stated, affords any relief, and usually aggravates the distress. We commence with the milder diaphoretics, and, afterwards, employ articles rather more stimulating, of which the most efficacious is the Dover's powder. But it is a popular practice of our country, not without some professional sanction, to treat this state of rheumatism, with the Virginia snakeroot, the thoroughwort, and, above all, by the pleurisy-root. Each of these articles being very certainly diaphoretic, I have no doubt, when judiciously directed, of their utility.

To the prohibition of early and active sweating, an exception exists in the torpid or tetanoid variety of the disease. The indication here, at first, is to awaken sensibility, and to bring on a reaction, with

which intentions, I have found the vapour bath and frictions, aided by the Dover's powder, perseveringly continued, the most effectual. Development of action having taken place, venesection, and its auxiliaries may be resorted to with those other means appropriated to the more ordinary forms of the disease, in the several stages.

As in gout, diuretics sometimes prove of immense advantage in rheumatism. Nearly the same articles, as well as the rule for their employment, are suited to both cases.

Colchicum, in union with the spirits of nitre, is especially worthy of trial. Its properties are very peculiar, and it seems, on some occasions, to display a sort of specific agency. But the pipsissewa, pyrola umbiliata, has acquired so much repute, as to have had bestowed on it the popular title of *rheumatism weed*, and may hence have claims to attention.

These various remedies failing, and where, especially, evidence arises of a disposition in the case to glide into the chronic state, we should not hesitate to interpose mercury, with a view to a moderate impression, which usually proves a very decisive process. Having presently occasion to say more of it, I shall now only further remark, that, under the circumstances immediately before us, it will be found often expedient, and, particularly, if much pain exists, to unite opium, and, sometimes, ipecacuanha, to the calomel.

In attending to these general indications, the local affection is not to be overlooked. The pain of it, when violent, can hardly be borne, and has, certainly, the effect of keeping up fever. On every account, therefore, we should endeavour to do it away. But, as in gout, some difference of opinion prevails, as to the proper measures to be adopted. Cold applications, even snow or ice, have been lately employed. But I cannot be persuaded of their general propriety. Granting for a moment, the utility of them, I should much apprehend a metastasis. Yet I am in possession of some evidence in support of this practice, of too much importance to be withheld. By Professor Jackson of Boston, I have understood, it is constantly pursued, and not less by the physicians of Russia, and Spain, and, as is represented, with unequivocal advantage. Yet I repeat, that my own experience, confirmed by the tenor of medical authority, is against it, for the reason assigned.

No great relief is, however, afforded by opposite means or warm fomentations, though I cannot allow that they are utterly destitute of effect. The hop poultice I have found the best of such applications. It is said, however, that steaming the part by means of an apparatus lately contrived, is still more lenitive and emollient. By Seudamore his mixture is strongly recommended, the composition of which has been noticed. Cabbage leaves are sometimes palliative, and still more so, are those of the tulip-poplar, placed on the part.

In the last few years, the practice of Mr. Balfour has attracted no inconsiderable attention. It consists in bandaging, as tightly as can be endured, the affected part by a flannel roller, with the occasional use of frictions. Whatever may be its utility, in some other applications, of which I am hereafter to speak, I cannot consider it adapted to

an inflamed and sensible condition of the local affection.

Discarding most of the preceding measures as nugatory, or of inferior efficacy, our main reliance is to be placed on topical bleeding by leeches or cups, frequently renewed, and next on repeated blisters. Governed by those theoretical notions, to which reference was formerly made, these appliances are now directed by some practitioners to the spine. That, on certain occasions, they have thus answered better, I am unwilling to deny, though, at the same time, I must insist, that, where more successful, the cases were not genuine rheumatism. By revulsion, bleeding from a distant point may be doubtless serviceable. Yet it is equally true, that it oftener fails, and is generally less effectual than when practised near the affected part.

In regard to the use of opium, we are governed, very much, as in gout. It seldom fails, according to my experience, to exasperate *acute, unsubdued* rheumatism. Even in the form of Dover's powder, and where it produces perspiration too, it mostly, without abating pain, adds to the heat and restlessness. This fact is particularly entitled to attention, as patients, in extreme anguish, very often demand, in a clamorous manner, a dose of the medicine.

Though the practice, with opium, should be generally regulated by the preceding cautions, there are cases, in which it may be resorted to, at a much earlier period. The form of the disease, to which I refer, sometimes succeeds genuine rheumatism, after a few days continuance. It is, however, more commonly met with as an original state in women, or other persons of weak and irritable habits. There is, here, no force of vascular action, and incomparably more of irritation, than inflammation. Either alone, or in conjunction with calomel and ipecacuanha, as has before been mentioned, opium is unequivocally serviceable.

Located in the more diffused portions of the fibrous tissue, and, especially, the periosteum, essentially the same course is to be pursued in the disease. What I shall say of the affection of the pericranium, to which my remarks will be confined, may suffice as a general direction. The remedies, here, are steaming, leeching, a blister to the nape of the neck, and keeping the head warm by an envelope of cotton, or wool, or a flannel or fur cap. Combined with these topical means, evacuants of the bowels are serviceable, nauseants are so, also, and vomiting will promptly relieve it, on some occasions. As further means, opiate diaphoretics are deserving of confidence. Many persons, with thin hair, or entirely bald, are very susceptible of such attacks, on the slightest exposure. Wearing a wig by day, and a warm cap at night, I have hardly ever known to fail as preventives.

At a commencement held Friday, April 6th, 1838, the degree of Doctor of Medicine, in the University of Pennsylvania, was conferred upon an hundred and forty-four graduates. Thirteen had received the degree in July, 1837, making, in all, one hundred and fifty-seven.

M. HEURTELOUP, by request of the emperor of Russia, is about to write a treatise on Lithotripsy.

## BIBLIOGRAPHICAL NOTICES.

TRAITÉ PRATIQUE DES MALADIES VÉNÉRIENNES, ou, *Recherches Critiques et Experimentales sur l'Inoculation appliquée à l'étude de ces Maladies; Suivies d'un Résumé Thérapeutique et d'un Formulaire Spécial.* Par PH. RICORD, Docteur en Médecine, Chirurgien de l'Hôpital des Vénériens de Paris, &c. &c. Paris: 1838, pp. 808, 8vo.

A PRACTICAL TREATISE ON VENEREAL DISEASES, or, *Critical and Experimental Researches upon Inoculation applied to the study of these Diseases, &c.* By PH. RICORD, M. D., Surgeon to the Venereal Hospital at Paris, &c. &c. Paris: 1838, pp. 808, 8vo.

(Concluded from page 146.)

WE next take up the consideration of the author's views on the treatment of venereal affections. Before entering upon them, the subject of the prophylactic treatment of syphilis claims notice. This is very freely treated. The Gordian knot of the moralist M. Ricord cuts at once; he ridicules the idea of viewing syphilis as a scourge from Heaven, for the just punishment of libertinage. We are not disposed to discuss the moral question with the Parisian surgeon, nor to enter into his minutiae of detail upon the matter of prophylaxis. Police regulations, of a severer character than those even of Paris, he urges as the most probable effectual means of eradicating the Venereal. Such is the view taken by M. Parent Duchatelet, in his work\* on the *morale* of the same subject. The introduction, however, of such hygienic regulations into this country would be impracticable.

We shall pass over in rapid review the modes of treatment recommended by the author for the different forms and stages of venereal affections. We shall follow his own division of the subject.

On the subject of *chancres*, his most important inculcation is the necessity of cutting short the disease at its commencement, by getting rid of the seat of infection. Cauterization with the nitrate of silver best effects this object. In the virtue of this article he has great faith, in all stages of the affection, not deeming it incompatible with a high state of inflammation. If the chancere be deeply seated in the tissues, nitrate of silver may not penetrate to a sufficient depth; in these cases the caustic potash is recommended, used with proper precautions. We cannot dwell at length upon the local applications used for ulcerated chancres. They will not be found to differ essentially from the ordinary practice. Much reliance is placed on dressings of charpie, moistened slightly in the French preparation, vin

\* *De la Prostitution de la Ville de Paris: Paris, 1836.*

aromatique. Mercurial ointments are especially eschewed. On the subject of the internal administration of mercurials, the author's views are moderate and consonant with the generally entertained opinions of the day. Admitting that, in the majority of cases, mercury is more hurtful than useful, he grants the existence of circumstances, in which the employment of it may be attended with good results. These, however, he cannot point out with any precision, and, in resorting to the remedy when ordinary means fail, he confesses that he is but yielding to a rational empiricism, out of respect for a therapeutic agent, so long and so often regarded as specific. An exception is made in the case of the indurated phagedenic chancre. Whenever a degree of induration accompanies a chancre, which prevents its cicatrization, or persists, after its superficial cure, and, especially, when it tends to give it a phagedenic form, a mercurial treatment is strongly indicated, particularly as a guarantee against the development of secondary symptoms.

The practical precepts, laid down for the management of *buboës*, are excellent. They offer nothing, however, sufficiently novel, to be presented in detail to our readers. We may mention, that, in the absence of high inflammation, and when the development of a virulent bubo is apprehended, the author's plan is, to cover the tumour with a small blister, and dress the surface with charpie, steeped in a solution of corrosive sublimate, twenty grains to the ounce, or some other caustic, which is kept on for two or three hours, until an eschar is produced. Emollient applications follow, and the ulcer, left by the falling of the eschar, is simply dressed. This must be a painful proceeding, and, we should think, not often admissible.

We pass to the consideration of the treatment of constitutional syphilis. On the subject of prophylaxis, M. Ricord again urges the importance of destroying every sore or solution of continuity that shows itself after copulation, whether its character be deemed suspicious or otherwise. We are confident that a general compliance with this recommendation is the most effectual barrier that can be opposed to the ravages of syphilis. After the establishment of a chancre, the best prophylactic against constitutional infection is the rapid and radical cure of the primitive affection, without remains of induration. If this latter persist, after a mercurial or other treatment, consecutive symptoms may be confidently anticipated. Does the use of mercury favour the development of the syphilitic diathesis? No further, we think, with M. Ricord, than by retarding, if improperly administered, the cure of primary symptoms. To

attribute to the effects of mercury the constitutional affections of syphilis, is a much more untenable position, than to urge it as a special preventive or therapeutic agent. Attention to hygienic precepts, by maintaining a proper equilibrium of the functions, and preserving the general health, is a powerful safeguard against the development of secondary symptoms.

The disease having become constitutional, the treatment of the secondary symptoms next occupies our attention. Delay is here obviously inadmissible; under no circumstances, is so grave an affection as syphilis to be allowed to strengthen its hold on the constitution, which it so rapidly undermines. The set of remedies, usually resorted to, comprises antiphlogistics, regimen, baths, sudorifics, tonics, antiscorbutics, and others, which may be comprehended under the general head of alteratives. To all of these M. Ricord attaches due importance. In an antiphlogistic course, properly timed, he has much confidence. The influence of diet is, on all hands, confessedly powerful. The starving system, where there are irritable, inflammatory venereal affections, in robust, vigorous subjects, produces sometimes astonishing effects. Not less happy are the results of proper nourishment, in debilitated individuals, of scrofulous disposition, previously accustomed to scanty and impoverished aliment. The author dwells particularly upon the efficacy of baths in relieving cutaneous affections. In the virtues of sudorifics, and particularly of sarsaparilla, he has little faith. Tonics are never to be neglected; in the Venereal Hospital, daily use is made of bark, the bitters, the martial preparations, particularly the iodide of iron, most valuable in scrofulo-syphilitic affections, and of iodine uncombined. The preparations of gold and silver, lately put forth as almost specifics in syphilis, failed completely in M. Ricord's hands. It is upon *mercurials*, when not counterindicated, that he most relies. Not regarding mercury as a specific, he employs it, in the absence of a specific, as the safest and most powerful remedy we possess. It is to be administered in doses, regulated according to the symptoms and constitution of the patient, and gradually increased till its good effects are produced, or a contrary result points out the propriety of pausing. The increase of doses, M. Ricord has found most efficacious when pushed suddenly from a very small to a very large dose, and after an interval of five or six days, rather than by a gradual daily addition. Salivation is to be avoided, as at best useless, suspending the cure, and adding a serious complication to the existing affection. The preparation preferred by M. Ricord is the protiodide

of mercury, commencing with pills of one grain. One other remedy is noticed, opium, which, when specially indicated, or employed as a corrective, during the mercurial course, is highly useful.

The most common secondary symptoms are the eruptions, which appear on the skin and certain mucous membranes. These may vary in character and duration, may terminate simply, or, running into suppuration, become pustules and afterwards ulcers, or, finally, end in the formation of indurated or ulcerated tubercles. For a rational diagnosis of such affections, the author thinks we can look only to the previous existence of a chancre, or to a certainty of hereditary taint. Even the copper colour of the blotches, so generally laid down as characteristic, usually shows itself late, is well marked only after they have been deeply seated in the skin, and is not detected in the mucous membranes. In the treatment of these cutaneous affections, commencing with antiphlogistics, if there be febrile excitement, reliance is mainly to be placed on a mercurial course. Mucilaginous and vapour baths, fumigations with cinnabar, and, in the scurfy and pustular forms, frictions with the ointment of the protiodide of mercury, are highly advantageous. M. Ricord considers his local treatment for the mucous tubercle, (venereal wart,) as specific, so certain and rapid are its curative powers. His plan is to wash the parts twice or thrice, with pure chloride of soda, if not ulcerated, and, if in this condition, with a solution, just strong enough to be felt. Calomel is afterwards sprinkled over them, and, under these applications, enormous masses of the eruptions disappear, in a very few days. Syphilitic ulcers are to be treated much as chancres; when in the throat and other internal situations, M. Ricord employs the ordinary gargles and dressings.

Syphilitic iritis is managed by the usual measures of depletion and counter-irritation, with a mercurial course; sarocele is treated by mercurials, locally and internally.

Perhaps no class of syphilitic affections is more interesting, than those which the author classifies as *tertiary*. As their diagnosis is obscure, so has their dependence upon primary syphilis been called in question. There are not wanting those, who attempt to trace them, in their most serious and intractable forms, to the remedies, particularly mercurials, used in combating the original affection. This opinion, however, is, we think, not warranted by argument or facts. The ordinary effects of mercury do not certainly show themselves under the hideous aspect, to be met with in the venereal wards of our hospitals; nor can they, who deny the specific nature of syphilis, and treat it as a simple

irritation, be allowed to account for these effects, by a supposed complication of the influences of the remedy and the disease. That the worst features of constitutional syphilis have shown themselves in cases, not treated by mercury, is a well established fact; while the number of individuals is not small, who, although exposed to the full action of this medicine, have recovered without any such after symptoms. The diagnosis of the tertiary affections is established, by the frequency of their occurrence after primary syphilis, by the absence of other causes, and by their development after characteristic secondary symptoms, which are almost invariably the connecting link between the primary and tertiary appearances. On the therapeutics of special tertiary affections, we cannot go into particulars. It is sufficient to remark, that M. Ricord has not here the same confidence in the powers of mercury, as in the secondary form. His plan of treatment varies with the symptoms, and seems judicious.

The remaining chapters of the work, on the various forms of blennorrhagia, and some kindred affections, we should be glad to be able to notice fully; but this review has been already extended beyond our ordinary limits. We have wished, however, to bring before our readers a detailed account of the novel views of M. Ricord, on a topic, which, much as it has been discussed, has lost none of its interest. An experimental work, announcing important conclusions, the *Traité Pratique* has strong claims to notice. It throws light upon many obscure points, and establishes, upon the basis of observation, the moderate doctrines, on the vexed subject of syphilis, upon which medical opinions have now generally converged. We have preferred presenting a simply analytical rather than a critical review of such a work.

*Transactions of the Medical Society of the State of New York.* Vol. IV. Part I. Albany, 1838, p. 80.

This is an interesting pamphlet, offering, however, but little variety of matter. We have read with pleasure the address on homœopathy by Dr. McNaughton, the president of the society, the tone of which is characterized by good sense and moderation. A commendatory notice of Dr. Hull's "Utero Abdominal Supporter," by Dr. John F. Gray, of New York, and Statistics of the Blind, by S. Hazard, Esquire, of Philadelphia, are the remaining papers of the transactions. We could wish to see a portion of the vitality of the New York Medical Society imparted to some of its lethargic sisters.

## CLINICAL LECTURES.

## PENNSYLVANIA HOSPITAL.

*Saturday, April 7th.* At 11 o'clock Dr. HARRIS commenced: I propose this morning to make a few remarks on affections of the bones; they are subject to the same diseases as the soft parts, and are liable to inflammation, accompanied by similar symptoms, as heat, redness, pain, &c., which may terminate in suppuration, ulceration or caries, and gangrene or necrosis. We have also affections of a malignant character, such as osteo sarcoma.

Caries occurs in the epiphyses, bodies of the vertebræ, and in the flat bones; whilst on the other hand, necrosis is found in the shafts of the long bones. When inflammation takes place in the latter, it is very apt to terminate in its death. The periosteum does not die with it, but is detatched, and commences the secretion of a new bone, by which the old bone is encased. Frequently the dead bone occasions much constitutional irritation, which requires its removal. This must not be done until its separation is entire, as it would excite too much irritation and pain. When, however, this separation has occurred, the sequestrum is to be taken away by cutting through the soft parts, applying a trephine to the new bone, when the opening is not sufficiently large, and removing it with the forceps.

In caries no restoration of the bone takes place, as in necrosis, by the secretion of a new bone by means of the periosteum. If a flat bone be the subject of disease—as for instance the frontal, or parietal—a ligamentous substitute is formed.

When caries occurs in the joints, producing white swelling, it commences in the synovial membrane, which becomes thickened; a gelatinous fluid is secreted; the disease extends to the cartilages and the heads of the bones concerned in the articulation, rarely commencing in the cancellated structure.

In the beginning this disease, arising as it mostly does from a sprain, from cold, or from mechanical violence, is curable. If called early, you must insist upon an absolute state of rest. Dr. Physic, who made so many important discoveries in regard to the treatment of affections of the bones, instantly ordered the patient to his bed, to remain there for two or eight weeks, or even a longer period. Our first remedies are to be of the depleting kind, and are most important. If called later, and the limb is greatly swollen, the patient suffering from the pain arising from the amount of fluid, or, perhaps, pus secreted in the joints, a question has arisen as to the propriety of opening it. The constitutional irritation arising from such distention is very great. I would prefer promoting the absorption of the fluid in the joint, which not unfrequently succeeds. If we fail in such efforts, it is more judicious to tap the joint, than allow the patient to be worn out by the pain and irritation, caused chiefly by the distention.

In addition to the causes already enumerated, a peculiarity of constitution and condition of the system may produce the disease. Many surgeons have considered syphilis as another cause. This I doubt, for when it has been alleged to have arisen

from this affection, it has invariably been found to have taken place after the use of mercury.

Although, perhaps, not exactly in place, I would remark, that owing to the fatality of the venereal disease among the British soldiers in the Peninsula, Rose, Ferguson, Hennen, and Guthrie, were led to pursue the Portuguese plan of treating it without mercury, and in not a single instance was it followed by diseased bones. When Sir James Mac Grigor, the director general, received the reports from the British army surgeons connected with the army of Spain, he issued a circular directing all the surgeons to make comparative trials of the two plans of treatment, and all concurred in reporting the same results.

Fracartorius, an eminent physician of Naples, who wrote about the termination of the fifteenth century, remarks: "During my practice, the venereal disease has in some degree changed its character. When I first treated this affection, it never invaded the bones, but now these symptoms are by no means uncommon. This new feature in the disease, I attribute to the new remedy, which is mercury." It was about this period that mercury was introduced as a medicine.

[Dr. Harris now introduced a patient affected with caries of the scapula, and continued:]

The man presented before you fell, in June last, from a two story house, and severely contused the acromion and spine of the scapula. It was followed by pain and heat of the injured part, inability to move the shoulder joint, or to use the arm, without aggravating the pain of the shoulder. He was brought into the hospital in this condition in August, about two months after the accident. In January he was seized with erysipelas of the part covering the scapula and shoulder, accompanied by great constitutional disturbance. The disease yielded to the ordinary remedies, but left the patient in a state of extreme prostration. In three weeks afterwards, and before he had entirely recovered his strength, he was attacked with the same disease, and which was repeated every few weeks, until his life was placed in great jeopardy. In this instance free incisions were made to the bone, which afforded prompt relief of all the local and constitutional symptoms. These incisions disclosed the state of the bone, and determined us to remove the caries.

Portions of the scapula have been often removed, and Cheselden reports a case, where he removed the entire bone.

Excision of joints, too, is now frequently performed to relieve patients from the destructive effects of caries. Terrible as this operation may appear, it is attended with a degree of success which has proved highly encouraging. The great recommendation of excision, is, that it saves to the patient a useful limb.

The objections to the operation are, the difficulty in performing it, the danger, and the useless condition of the limb afterwards.

The difficulty of an operation should never constitute an objection, if it can be done with comparative safety. The success of White, of Manchester, Dupuytren, Syme, of Edinburgh, and others have ranked it among the standard operations.

In sixteen operations of carious elbow joint, on which Syme performed the operation of excision,

all recovered except three. This is much greater success than attends amputations. In Paris one half die after amputations, and in this city rather less than one fourth.

The frequent cause of death after amputation, arises from the formation of metastatic abscess. This disease seems to be caused by a disturbance of the functions of the system, by the loss of so considerable a portion of the body. The objection to opening the joint should not be deemed valid, as it is already in this condition by the progress of the disease.

So far is the limb from being rendered useless by this operation, that it, in a majority of cases, performs its various offices almost as perfectly as before the injury was inflicted. The only instance in which I have excised a carious joint, was in this hospital three years ago. In this case, the whole of the elbow joint was in a state of caries. The operation was successfully performed, and the patient now enjoys perfect health, and the hand and arm can perform all the ordinary offices of a hard working woman.

In the case before you, the shoulder joint is stiffened, and the structure around it thickened. After careful examination, however, I am inclined to think that it is not affected by caries. After the disease of the scapula is exposed by dissection, then the condition of the joint may be accurately ascertained. Should the caries extend to the glenoid cavity of the scapula, and to the head of the humerus, I am prepared to excise the whole articulation.

[Dr. Harris now placed the patient in a horizontal position on his sound side, and made an incision, commencing near the base of the scapula, and along its spine to the acromion process. The muscles were detached from either side of the spine of the scapula, which fully exposed the disease, which occupied two thirds of its extent. The caries was removed with the cutting pliers and chisel. A portion of the acromion not being involved in the disease, was preserved. The caries, happily, did not extend to the joint.]

#### LITHOTRIPSY.

Wednesday, April 18th. At 11 o'clock, Dr. RANDOLPH, commenced: I propose, gentlemen, today, to call your attention to a case of stone in the bladder, and I shall exhibit to you presently a little patient, aged thirteen years, upon whom I shall attempt to perform an operation, which, at this time, claims the serious attention of the surgical profession. This case is rendered more interesting from the fact that, eleven years ago, I removed a stone from this boy's bladder, when he was but two years of age, by means of the operation of lithotomy. Here is the calculus which I removed whole and entire. It is composed principally of uric acid. The incisions healed, after the first day, by the first intention; after that time no urine passed through the wound. This is the third or fourth case, during my practice, in which I have known the recurrence of a stone in the bladder after its complete extraction, by means of the operation of lithotomy.

This boy was brought, about four weeks since, into the house, in a state of great suffering. His

bladder was in a very irritable condition, and he endured a great deal of pain, particularly after voiding his urine. He also experienced a frequent desire to pass his urine, and an inability to hold it for any length of time. When he commenced urinating, the water, sometimes, stopped suddenly, and he was induced to strain violently, but ineffectually; after a short time, however, it would recommence flowing. Some blood and mucus were occasionally discharged through the urethra. His efforts at straining were so violent as to produce *prolapsus ani*; this is not an uncommon attendant on calculus in the bladder.

For the relief of this painful malady surgeons were, until very recently, in the habit of cutting open some part of the bladder, and extracting the stone by means of the forceps. I shall not detain you now with a description of the various cutting operations which have been employed for the removal of stone in the bladder. The one most generally preferred of late years, and which is most frequently performed in this city, is called the *lateral* operation of lithotomy. It is done in this manner. A grooved staff is introduced into the bladder, through the urethra, and an incision is made in the perineum, down to the membranous part of the urethra, which is divided, laying bare the groove of the staff; next the prostate gland, and neck of the bladder, are to be divided laterally, either by a knife or the gorget, and the stone extracted by a pair of forceps. Notwithstanding, in this country, the operation of lithotomy has been attended with the most extraordinary success, it must be conceded that it is one of the most horrible, terrifying, and hazardous operations which the surgeon is called upon to perform. It is replete with danger, and liable to numerous objections. The patient in some instances dies of hemorrhagy from vessels divided out of sight and out of reach. Convulsions occasionally follow, under which he may succumb, or he may die from great prostration, or the shock his nervous system receives at the time of the operation. When the patient escapes these immediate dangers, he is liable to the occurrence of peritoneal inflammation some few days subsequently, the most common cause of death after this operation. The calculus, too, when soft, during its extraction, may break into pieces, rendering the operation tedious, and increasing its dangers. In such cases, too, the disorder is likely to return, from some portion of the stone remaining in the bladder, and acting as a nidus for after concretions.

Another inconvenience attending the operation of lithotomy, is the liability to incontinence of urine. This is particularly the case in females, especially adults, and is an evil of such magnitude, and so distressing, that you had almost as well suffer your patient to die as to expose her to it, for under such circumstances life is not desirable. In the male, too, the incisions in the perineum sometimes do not heal, and you have established a *fistula in perineo*, a most difficult condition to relieve. Now when the patient is lucky enough to escape all these inconveniences, and the case progresses successfully and happily to a cure, he often is condemned to lie for several weeks in his bed with all the clothing about him saturated with water.

To avoid all these inconveniences and hazards,

the ingenuity of several European surgeons became directed to the invention of instruments, by means of which, a stone in the bladder might be gotten rid of without any cutting operation. It is now about sixteen years since the news reached this country, that Mr. Civiale, of Paris, had invented instruments, by means of which he was enabled to remove a calculus, without any incision. In 1824, Mr. Civiale submitted to the French Royal Academy of Medicine, an account of his plan of operating, together with his instruments. A committee was appointed, by this institution, to examine into its merits. It consisted of the celebrated Surgeons Baron Percey, and Mr. Chaussier. These gentlemen examined carefully the claims of this operation to favour, and in their report pronounced it to be "glorious for French surgery, honorable to its inventor, and consoling to humanity."

It is proper that I should mention to you that about this period, or perhaps previous to it, Mr. Leroy d'Etiolle, of Paris, appears, by a singular coincidence, to have been engaged in the same manner Mr. Civiale had been, and he also produced instruments very similar to Civiale's, and which operated upon precisely the same principles. The idea of destroying a stone in the bladder did not, however, originate with either of these gentlemen; it had been conceived a long time previous, and instruments had been devised for the purpose, drawings of which we now have.

Mr. Gruithuisen, of Bavaria, preceded both Mr. Leroy and Mr. Civiale in proposing a method of destroying a calculus in the bladder.

Be this though as it may, from this period Civiale went on performing his operation with immense success, and there is indisputable evidence of his having effected a great number of cures. His reputation consequently soon became very great, and persons came from a great distance to obtain relief at his hands. As might be expected, his method now met with considerable opposition from many of the other surgeons who were unwilling to admit his brilliant success, and would not be convinced that his operation presented any extraordinary claims to their consideration, or that it would be destined to prove preeminently beneficial to suffering humanity in removing stone from the bladder. These gentlemen called in question the accuracy of Mr. Civiale's statements; they alleged, and, I am sorry to say, not without some reason, that he had exaggerated the number of his cases, as well as the success of his operations. Admitting this to be the fact, still no one can doubt that he has performed a sufficient number of cures to secure him lasting fame and celebrity, and to establish, incontestably, the great value of the operation.

As soon as Civiale's operation became generally known in Europe, and its successful results were clearly established, other surgeons directed their attention to the same subject, and they succeeded most happily in inventing instruments less complicated than his, and by means of which a calculus may be destroyed in the bladder more speedily, more safely, and quite as effectually. I allude particularly to the instrument invented by Mr. Jacobson, of Copenhagen, which he calls the "Brise-pierre-articulé," and the instrument invented by Baron Heurteloup, called by him the "Per-

cuteur Courbe." It is undeniable that these instruments possess considerable advantages over Civiale's, which they have almost entirely superseded. Mr. Civiale indeed admits their superiority, and notwithstanding he occasionally uses his own instruments, he has modified the "Percuteur Courbe" of Baron Heurteloup, and does not hesitate to employ it upon suitable opportunities.

[Here DR. RANDOLPH proceeded to exhibit, and describe to the class, the various instruments employed in Lithotripsy. He first showed and explained the *lithontripeur* of Civiale. He stated that he had employed this instrument in his first four cases, although he completed each of these operations with the *brise-pierre-articulé* of Mr. Jacobson. He is of opinion that in some cases the *lithontripeur* may prove of great service, as where an unusually hard calculus exists. One or two perforations would diminish the strength of the stone so much as to cause it to be readily crushed by either Baron Heurteloup's, or Mr. Jacobson's instrument.

He next exhibited the *brise-pierre-articulé* of Mr. Jacobson, of Copenhagen. This instrument he has used in eighteen cases, and prefers it to all others. It is perfectly simple, possesses great strength, and is as easily introduced into the bladder as an ordinary catheter. Objections, he stated, had been made against this instrument, but he conceived without any valid foundation. It has been stated that it was liable to pinch the bladder; this is far from being the fact, he said. Dr. R. replied at length to this, and also to several other objections which have been urged against the instrument.

Dr. R. next showed Heurteloup's *percuteur courbe à marteau*, and mentioned the great success which had attended the use of this instrument. He stated that he had used it in one case only; the last one he had operated on, and which was reported in the Examiner, No. 7, p. 116.

Some instruments for extracting fragments of stone from the urethra were also exhibited, and commented upon.]

DR. RANDOLPH resumed :

Soon after it became known in this country that Civiale had succeeded in removing calculi from the bladder without a cutting operation, the surgeons here very readily and willingly adopted the idea; they provided themselves with the best instruments that they could procure, and set about performing the operation. In consequence, however, of their instruments being made by persons wholly unaccustomed to their construction, and from the imperfect descriptions our surgeons were enabled to give, and in consequence also of the surgeons not having sufficiently studied the operation, and not having practised it upon the dead subject previously to applying it to the living one, I am sorry to say that these first efforts were entirely unsuccessful, and that they did not, in this city, succeed in a single instance. In consequence of this failure they became discouraged, and thought that the merits of the operation had been much exaggerated, and that it could only succeed in very rare instances. I, in common with my professional brethren, adopted the most favourable impressions respecting the operation, and having witnessed several of the unsuccessful efforts, I determined to qualify myself in

every possible way for the performance of the operation. My situation at that time, as surgeon in the Alms-House Infirmary, afforded me every facility for practising the operation upon the dead subject, and I embraced every opportunity of putting a stone into the bladder and destroying it by means of the instruments. Soon after this, I procured from Paris, a complete set of Civiale's instruments, and also the "Brise-pierre-Articulé" of Mr. Jacobson, and proceeded to the performance of my first operation in September, 1832. My patient was named Augustin, a French cook, well known in this city, aged 50 years. He had been afflicted with the stone for several years; it was large and composed principally of the phosphate of lime. I performed seven operations upon this patient, four by means of the Lithontripteur of Mr. Civiale, and three by means of the Brise-pierre of Mr. Jacobson. His urethra was very large, and he passed through it fragments of stone of an almost incredible size, with but little inconvenience. These operations were performed in the presence of Drs. Physick, Horner, La Roche, Rush, and other medical gentlemen. This patient remains perfectly well at the present period; of this, he assured me a few days since.

I do not intend, gentlemen, to detain you by detailing at length all my cases of Lithotripsy. Seventeen of these I have reported in the American Journal of the Medical Sciences. Since the last report I have performed the operation successfully in two other instances, making *nineteen* cases. Three of these patients were inmates of this house.

My sixteenth case was Dr. SILAS TOMPKINS, of New Bedford, Massachusetts, who came to this city to put himself under my charge, and to be in this institution. This gentleman suffered also from paraplegia. He published an account of his case in the Boston Medical and Surgical Journal, on his return home, and declared himself to be perfectly cured.

It has been urged, as an objection to the operation of Lithotripsy, that it is only partially applicable, and that it can be performed, advantageously, in a limited number of cases only. To this I may reply, that, out of upwards of twenty cases of stone, occurring in adults, which, within the last six years have occurred in my practice, I have found two only to which Lithotripsy was not applicable. I therefore am of the opinion that in adults, the operation may be adapted to eighteen cases out of twenty of stone. Another objection which has been advanced against Lithotripsy is, that fragments of the calculus are liable to remain in the bladder and form the nucleus of future stones. But I contend that the presence of the smallest fragment may be detected not only by sounding, but also by the feelings of the patient. The feelings of the patient may indeed be received as a pretty certain test of a perfect cure. When they say to you, "I am quite well," such is generally the case. I have rarely found it otherwise. Of course you should not rely upon their assertion, but satisfy yourself always by careful and repeated sounding. Indeed in many instances the smaller the fragment is, the more acute the suffering appears to be. The stone in such cases lodges at the neck of the bladder, and intense pain accompanies every effort to pass the water. When large the calculus falls to the fundus of the

bladder, and does not obstruct so much the flow of urine.

It has been said too by the opponents of Lithotripsy, that you are unable to break up a very hard calculus, as for example an oxalate of lime. In refutation of this I will state to you that in May, 1836, Mr. William Reynolds, of Bedford, Pennsylvania, came to this city to consult me for stone in the bladder. He had been laboring under the affection for four years, and had suffered a great deal of pain. His bladder was very irritable and contracted, and he was unable to retain more than a gill of urine, and during the night he passed it involuntarily. The only relief he found for his great agony, was to lay on his back, elevating his legs, so as to throw the stone on the fundus of the bladder. On no occasion had he passed any sabulous matter. Now, in the soft calculi more or less sand is most generally mixed with the water voided—with the hard none. I introduced a sound, and found a very large calculus, and from the ringing sound the percussion gave, as well as from the rugged eminences with which I felt it studded, I was convinced that it was a mulberry calculus—the hardest description of calculus. I told him that I was not willing to cut him for stone, as his bladder was, I feared, extensively diseased. I also told him that I was not sure I could crush it, as the possibility of doing so had been denied by respectable authority, but that I would try. On the 22d of May, in the presence of several medical gentlemen, I commenced the operation. I introduced the instrument of Jacobson into his bladder, caught the stone immediately, and wrapping a towel round the handle, I proceeded gradually turning the screw. In a few seconds I had the satisfaction of finding the stone give way. The operation was repeated afterwards several times, until every particle of the stone was removed. The stone was subsequently analysed, and found to be an oxalate of lime.

I have already mentioned to you that at the time I commenced my operations, for Lithotripsy, in consequence of the repeated failures which had attended the previous efforts to perform this operation, many surgeons became discouraged, and were disposed to think that the value of the operation had been much overrated. I am happy to say, however, that it has been taken up by other gentlemen in this city, and elsewhere, and they have performed it with great success. Dr. N. R. Smith, of Baltimore, has lately reported several interesting cases of stone, some of them occurring in very young children, upon whom he performed the operation of Lithotripsy with the most happy results. The operation of Lithotomy, however, in children is comparatively so safe, that a substitute is hardly desirable.

I shall now introduce the little boy upon whom I propose to operate. His bladder and urethra are very irritable. Some days since I introduced the Brise-pierre into his bladder in order to see how he would bear it; I caught the stone and broke it once. He has passed out these fragments, which I here show you. Even this solitary operation gave him some relief.

[Dr. Randolph now proceeded to operate. He introduced the instrument of Mr. Jacobson into the bladder and caught the stone three times, and

crushed it with great ease. The boy was afterwards placed in a warm hip bath and fifteen drops of laudanum administered to him. Upon being questioned, closely, he declared that it did not cause him much pain. When the operation is completed we shall report it in full.]

LECTURES ON CLINICAL MEDICINE, delivered at the Philadelphia Medical Institute, by W. W. GERHARD, M. D., Physician to the Philadelphia Hospital, &c.

RUBEOLA.

*Tuesday, April 24th.* DR. GERHARD commenced the lecture, by calling attention to the case of the man Robb, which was under notice, on the subject of *acute articular rheumatism*. The opiate practice had been carried out, with decided but gradual improvement. Yesterday, however, there was a return of the affection, but under a much less severe type, marking the stage following the acute form of the disease, in which the symptoms are swelling and mere soreness, rather than pain or heat. With the reappearance of the affection in this modified shape, the impulse of the heart, which had been increasing, has been, for two days, much diminished. There is at present an effusion of about a pint of liquid into the pericardium. The dullness on percussion is so manifest, as to leave no doubt of this fact. It is not from the simple presence of unusual dullness, that we draw our conclusion, but because we have seen this dullness notably increase, from day to day, since the patient has been under inspection. A prominence of the chest over the region of the heart has also appeared, in a marked manner, during this time. Another proof of the effusion is the absence of the impulse of the heart, which is next to nothing. You recollect the roughness of the two sounds of the heart, particularly the first; this roughness has diminished, as effusion has gone on. In proportion then, as the pericarditis has advanced towards secretion, have the signs of endocarditis become less evident. This fact, which exemplifies a general rule of pathology, is worth recollecting. Of pericarditis the physical signs are, mainly, the increase of prominence and dullness, with faintness of the impulse of the heart, while endocarditis is to be recognised by increased action of the organ, and the roughened sound, sometimes amounting to that, termed rasping. The physical signs of these two affections, particularly of pericarditis, are exceedingly easy of recognition, so much so, that, knowing what they are, you will hardly fail to detect them. The two diseases are not likely, I have told you, to exist together, under an equally severe type. The same thing is true with pleurisy and pneumonia; they may co-exist, but very severe pleurisy and pneumonia do not go together. If, for example, the pleurisy be aggravated, by the compression of the lung, it prevents the development of acute inflammation. The law of pathology, founded on the two cases I have adduced, you will find generally to hold good. I shall here conclude my remarks on the case of rheumatism: the opiate practice was continued till yesterday, when it was modified by the substitution of a single dose of Dover's powder at night, in place of the opium pills.

It is my intention in this course of lectures, gentlemen, to take up the various acute diseases in succession, as they come before our notice, at the hospital, preserving, as far as possible, the natural connection amongst them. A very unusual affection in general hospital practice has lately claimed your attention, I mean *rubeola*. To see it pervading epidemically the wards of adults is a phenomenon, which I have never before witnessed, and hardly expect again to observe; as it is a disease which usually appears but once during life, and is generally confined to childhood. During the last six weeks, however, there have been as many as seven or eight cases, in my single service, and three or four in the other wards. My recent cases were as follows:

Morris, a man of nearly forty; Perry, a lad of eighteen, and three others nearly of the same age.

Previous to detailing the symptoms which characterize rubeola, I shall make a few remarks on its pathology. The pathology of measles, like that of other exanthematous affections, is to be divided into two parts, one comprising the morbid changes in the body, which are characteristic of and essential to the disease, the other being those which are merely accidental. The first are of course to be looked on as pathognomonic.

The description of the affection, given by Sydenham, is so good, and agrees so accurately with its appearance, at the present day, that I shall read it to you at length, and adopt it, in most particulars, in preference to more modern accounts. It cannot be amended materially, except by examining the symptoms with the aid of the numerical method; a task which, at present, I am not able to undertake.

This excellent description of Sydenham's shows his powers of observation in favourable contrast with some of modern times. His general account of the disease holds good in the cases, which we observed at the hospital. Thus, our symptoms of the first day, like his, were chilliness and cold shiverings. The second day we had the catarrhal symptoms, connected with coryza and the flow of tears, as described by Sydenham. This is the best sign to distinguish measles, in its incipient stage, from other exanthemata. In this stage, the other exanthematous affections offer no mark by which they can be diagnosticated with any certainty. They have, at this time, numerous symptoms in common, including some belonging to other febrile diseases. Thus, in scarlatina, the sore throat is by no means sufficiently characteristic, and small pox may, at its commencement, be very readily mistaken for typhoid fever. Dr. Louis, who certainly is most accurately familiar with typhoid fever, has more than once mistaken for it the incubation of small-pox.

The symptoms that follow, as the sick stomach, loss of appetite, slight cough, heaviness of the head and eyes, occur now just as they did in the time of Sydenham. The only irregularity in Sydenham's description consists in the large red wheals, which have not, in our cases, made their appearance, nor have I often observed them. The swelling of the eye-lids continues the same. The vomiting occurs particularly in children, and not in adults; we did not notice it in these cases.

Looseness of the bowels is the next symptom mentioned. This is not now a constant symptom in the early stages of measles, but, it is to be recollect, that the descriptive account of the disease by Sydenham has reference to an epidemic which took place in 1670. The diarrhoea I set down as an accidental symptom, and, as such, it probably complicated the epidemic of that year.

We next pass to his description of the eruption, which he characterizes most accurately. We have it now as then, appearing first in the form of red spots, resembling fleabites, which gradually coalesce into semicircular, crescentic, and circular shapes, showing themselves first on the face, and spreading thence over the rest of the body. As the eruption increases, there is a diminution of the other symptoms. The eruption is found in the mouth and throat, as well as on the skin. In the cases of the negroes, it was of course detected only in the eyes and throat. In the pharynx and palate, as elsewhere, the eruption was not so much elevated above the epithelium, as it is above the surface of the skin. The next part of the description is doubtful—that is, the mode of disappearance of the eruption. It does not disappear on the eighth or ninth day, as alleged by Sydenham, for traces of it remain for some time afterwards, in copper-coloured spots, as shown in the cases in our wards; even after the spots entirely disappear the skin remains rough and dry. I do not at this time intend to go more largely into the ordinary symptoms of measles, for I can scarcely add any thing to the graphic description which I have read to you from Sydenham. While at Paris, and at the Hospital des Enfants Malades, I collected a mass of observations on this subject; but, not yet having been able to analyse them, I must defer presenting them to you to some future time. I shall now call your attention to two of the accidental symptoms which may complicate the regular course of measles and often become the sources of great danger.

The first is bronchitis, of a severe character. A slight bronchitis may be looked upon as a necessary symptom of the disease; it is to be deemed accidental, when it appears under an aggravated type, or when the inflammation runs into the parenchyma of the lungs, and takes on the form of lobular pneumonia, which is similar to the pneumonia following the bronchitis of young children. This accidental symptom occurred in the man Morris, whom you recollect in the first ward; about the eighth or ninth day, when the eruption was fading, and our attention was directed to the development of moist rhonchi on the right side of the chest, showing the existence of severe bronchitis, with considerable dulness on the middle and posterior part, and some on the anterior region, of the left side—a common seat of lobular pneumonia in measles. Instead of getting well, the man has remained ill, in this state, exemplifying the general rule, that, when lobular pneumonia is developed, after the subsidence of the eruption, it lasts for a considerable length of time. The signs, by which its appearance is to be detected, are dulness on percussion, with a sub-crepitant rhonchus and a slightly bronchial respiration. In place of attacking the mass of the lung, and rendering it solid, the inflammation appears in the isolated

lobules, leaving amongst them portions of the lung still permeable to the air, which prevent the development of loud bronchial respiration. The respiration, in the very early stages of the disorder, and in the portion of the lungs, which are not inflamed, is not lost, but rendered louder, and roughened.

In the case of the boy Perry, the pneumonia appeared on the eleventh day of the disease, after the eruption had entirely subsided, no traces of it being left but a few copper-coloured spots. His right lung was attacked, as is commonly the case; perhaps, from its greater size, and from the circumstances of the patient's lying upon the right side. The lower, and not the middle and upper lobes, was attacked; in this respect as well as in others, it is like ordinary pneumonia, but differs from it, in the londness and looseness of the crepitus, which ceases in regular inflammatory pneumonia, as soon as the entire substance of the lungs becomes solidified. In this boy's case, as in that of Morris, convalescence has been very slowly established, and is yet by no means perfect; he is still lingering in a somewhat critical condition. In the case of Morris, I entertained, for a time, some fear of the existence of tubercles, the development of which is thought to follow attacks of measles; I say, is thought, for I am by no means certain that there is any necessary connection between the two affections.

The treatment proper to meet this complication of measles, is necessarily various. At the hospital des Enfants Malades, during my residence, local depletion by cups and leeches was largely employed by Dr. Guersent. But the debility, consequent on this mode of treatment, was favourable to the reproduction of the disease in other parts of the lungs, especially as the pneumonia was observed almost invariably in children of feeble constitution. The proper rule for the employment of leeches, is to confine it to cases, in which there is excessive dyspnoea, and a rapid extension of the pneumonia is going on. It extends through the lung most rapidly, in stout, robust children, and in them leeching does good. In the ordinary lobular pneumonia, as well as in that which follows measles, after one or two cuppings, the best treatment consists in small doses of ipecacuanha. By persevering with this remedy, until the expectoration, or rather the secretion, (for with children there is no expectoration, as they swallow the discharge,) is freer, the patient is relieved, and we may then complete the cure, by the exhibition of tonics and a generous diet. Above all, attention is to be directed to position. If the child lie constantly on its back, the development of pneumonia is almost certain. It must, therefore, be moved frequently from one side to the other, and be from time to time raised in bed or carried about. In addition to ipecacuanha in expectorant doses, the sulphate of quinine and some preparation of iron, in small quantities, may be given, combined with a generous diet, if the child should become feeble, and the quantity of red blood should diminish. You will find, that in my lectures, gentlemen, I am not at all disposed to insist on too rigid a diet. I have seen so much mischief result from the continued enforcement of a rigid diet, in the mode of practice which was prevalent in France a few years ago,

that it is with great caution, and no little fear, that I venture upon it, except for a short period. In some of the wards of the Enfans Malades, the practice was to place the children on a rigid diet, and the results were certainly far from favorable.

In the cases under notice, by pursuing the practice indicated, we have in a great measure, succeeded in getting rid of the accidental symptoms. But there is still some cough, and other traces of lingering bronchitis. What is now the proper treatment? It should be principally hygienic. The patients are to go freely into the open air, taking internally, at the same time, some of the milder tonics.

The next accidental symptom, likely to complicate the course of measles, is severe diarrhoea, near to the close or after the termination of the disease. At the Enfans Malades, the children died in two ways, when measles proved fatal, of lobular pneumonia, during the active period of the affection, and of diarrhoea, at the end of it. The lobular pneumonia usually showed itself at about the sixth day, the bronchitis appearing much earlier; but the diarrhoea did not come on, until the eruption was almost over, and desquamation was taking place. If this diarrhoea be but slight, no danger need be apprehended from it, and we rather avoid much interference with it. Indeed, it is generally looked upon as a safeguard to the child, and is, therefore, suffered to run on. But I do not consider the diarrhoea as slight and not to be checked, if it exceeds four, five, or six stools, during the day, and continues until it is accompanied by emaciation of the child, with paleness and dryness of skin. This variety of diarrhoea depends upon a particular state of the mucous membranes, in which they are pale and soft, seeming to be acted on by the altered fluids in the body, and instead of being themselves the seat of very active disease. I showed you the other day, at an autopsy, a similar state of the mucous membrane, but occurring in the stomach; in this case, however, it was probably produced by the action of the fluids, after death. This state of the mucous membranes, as it occurs in measles, I do not regard as an effect of inflammation, nor is it to be treated as such. Depletion, of any sort, here does no good, nor do remedies specially directed to the bowels always prove of much service. You must act on the skin, until its functions are restored, and for this purpose nothing is better than the sulphur bath, made by dissolving the sulphuret of potassa in water. I have seen children recover, at the Enfans Malades, under this treatment with astonishing rapidity. It not only relieves the particular symptom, to which it is addressed, but much improves the general condition of the patient. Indeed, it was remarked by Jadelot, that, the same remedy, employed for the management of itch, not only cured that affection, but besides left the patient in a general state of health and embonpoint. If the sulphur bath cannot be administered, one of warm salt water may be substituted. In addition to this treatment, adapted to the skin, slight opiates may be resorted to, with small doses of ipecacuanha, and astringents, which are supposed by some to act chemically upon the bowels. But depletion, by leeches or cups, must be abstained from, and the diet must be nutritious.

The last variety of accidental lesion, which occurs during measles, is acute diarrhoea during the height of the affection. This complication we have not witnessed during the epidemic at the hospital, though it was a very frequent occurrence, at the Enfans Malades, in 1832, which was just before the cessation of the Asiatic cholera at Paris. This epidemic of measles was probably similar in its character to that described by Sydenham. It is dependent on acute inflammation of the colon, and shows itself at the most severe period of the eruption; it is attended, generally, with the usual symptoms of dysentery, considerable pain, stools of small quantity containing slime, sometimes patches of false membrane, and blood; in fact, we have a regular attack of acute dysentery, complicating the measles. This complication is, I believe, most apt to occur in the summer months of the year. That is, measles are subject to the general rule of pathology, which determines the nature of the accidental symptoms, attending self-limited diseases. Thus, in the typhus fever, which was epidemic here during 1836, and part of 1837, we had, during the winter, symptoms of the acute affections most usual in winter, as those of the chest, and, in summer, it was complicated with diseases which are endemic in hot weather, as dysentery and disorders of the alimentary canal. Neither of these affections was in any manner a necessary accompaniment to the typhus. The complication of measles follow the same rule, except that, both the inflammations of the lungs and the bowels are more frequent than in typhus fever; we have, in other words, very generally lobular pneumonia occurring in the measles of winter and early spring, and affections of the alimentary canal, when the epidemic takes place in the summer months, particularly July and August.

The post mortem appearances, in this affection, differ from those of ordinary diarrhoea. If closely examined, the colon and rectum are found to be covered with patches of lymph, and their mucous membrane is much disorganized, and of a violet tint, as in severe dysentery. So universal were these appearances on dissection, during the epidemic at the Enfans Malades, to which I have just alluded, that a gentleman, who was observing it, thought that he had discovered a new law of pathology, and that there was a constant connection between rubeola and inflammation of the colon. He was, however, mistaken, and from his mistake we may infer the importance of observing with care the phenomena of several epidemics, and of again and again repeating these observations, before we allow ourselves to make from them any general deductions.

The treatment, at the Enfans Malades, for this dysenteric affection was the same that is employed in ordinary dysentery. It was attended with no great success, but it must be remembered, that severe dysentery is at all times a difficult affection to treat. The remedies, however, should certainly be the same in the complication we have been speaking of, as in the common variety. In the early stage, we must have recourse to antiphlogistics, with some fearlessness, by leeches and cups to the region of the colon and the anus. This dysentery differs essentially, as I have before said,

from the diarrhoea, occurring at the close of measles, and we are to have no fears here about the propriety of an energetic antiphlogistic treatment; it affords prompt and great relief. We may afterwards administer opiates in very small quantities; and moderate doses of ipecacuanha. Calomel is so rarely employed in France, that I have never seen it prescribed in these cases, and have not been able to test its efficacy in this affection, frequently enough to speak of the advantages of using it. The after management of the dysentery of measles is much the same as in common dysentery, except that the former will be found to be of greater obstinacy than the latter usually is.

From these details, then, we deduce the following corollary. In measles, as in other diseases of known duration, we have one constant set of symptoms, as the eruption, and febrile movement with anorexia, thirst, restlessness, &c.; and next, a series of accidental symptoms, which extend from the slight bronchitis, necessary to the affection, to severe bronchitis and lobular pneumonia, and from the slight necessary diarrhoea to diarrhoea of the sub-acute form, and severe inflammatory dysentery. It is to these accidental symptoms that you are to pay particular attention; and by doing so, I am persuaded you will much diminish the mortality of measles, which depends, as in typhus fever and small-pox, on the severity of the accidental complications.

There remain to be noticed some varieties of measles, not observed here in the late epidemic. The first variety may occur in the other exanthemata, and consists in an imperfect development of the eruption. This is not so frequent in measles as in scarlatina; but we have occasionally coryza, a flow of water from the eyes, and cough, with but a very slight eruption, or one that is confined to the face. This is still a genuine, although an anomalous form of measles.

The second variety consists in the severe complication of internal inflammation with an eruption, which disappears soon after the beginning of the disease, and may be looked upon as suppressed. You will have universal bronchitis, the whole mucous membrane being affected with inflammation of an intense character, instead of the usual slight blush. We have then a grave internal affection, occasioned by the want of action on the surface of the body, the disease being, as it were, concentrated in the internal organs. This variety is always attended with great danger. It is to be treated by active counter-irritation of the skin, to supply the place of the absent eruption; for this purpose, sinapisms, the warm bath, and the like remedies are to be resorted to.

The third variety is the black measles, or rubeola nigra. This is no real variety. It occurs in feeble children, in whom the blood is in a dissolved state, as from scurvy; or it may depend on the sudden development of lobular pneumonia, preventing the proper decarbonization of the blood in the lungs, and giving it a general dark tint.

These varieties are almost the only ones that you will meet with in practice, and on which it is therefore proper to dwell. Rubeola sine catarrho I have never seen, nor do I believe in its existence. Some change in the bronchial mucous membrane

is always to be detected; there is a dry rhonchus indicating a thickening of it, or we have at least some traces of a moist secretion. Cough is not a necessary attendant upon a slight bronchitis. It is impossible to decide with certainty upon its non-existence without a very careful examination, and I suspect it is the absence of close observation that has given rise to the variety of rubeola sine catarrho.

I have presented to you to-day but few clinical illustrations, as I was desirous of giving you a somewhat detailed descriptive notice of measles, a disease of so frequent occurrence, and which now prevails epidemically. I have insisted particularly upon the importance of the accidental symptoms which are most frequent, although other organs, as the brain and the wind-pipe are sometimes the seat of grave lesions, but they are not usually so much affected as the thoracic and abdominal viscera. There is another complication which is not rare in some epidemics, that is the gangrenous sore mouth of children, of which I shall treat at a future time.

Measles is perhaps a more frequent cause of after ill health than any of the other exanthemata. The bad effects of small-pox and scarlatina are usually confined to the course of the disease; they destroy life at this time or soon after. But measles, though less dangerous, during the eruption, may leave behind it greater organic lesions than either of the others. The effects of lobular pneumonia and diarrhoea are not easily got rid of; and, after a supposed convalescence from measles, we but too often see our little patients wasting away from emaciation, and, after a lapse of a few months, perish from the consequence of one or other of these dangerous complications.

LECTURES ON SURGERY, delivered at the Philadelphia Medical Institute, by THOMAS HARRIS, M. D., Surgeon to the Pennsylvania Hospital, &c.

ULCERS.

In common language an ulcer and sore are used as synonymous. The term ulcer is derived from the Greek word *Ελλος*, signifying to draw, because it was thought that peccant and unhealthy humours of the body were eliminated through it. Hence the old practice of dressing sores with such stimulating salves, as promote purulent discharges. This doctrine is now happily repudiated. I have already told you that suppuration is a destructive process, depending on derangement in the action of the capillaries, which secrete, in a healthy state, both the solids and interstitial fluids of the body. Ulceration is a mere compound action, consisting of the formation of little organic or fleshy eminences, called granulations, connected with the secretion of pus. The class of capillaries that secrete the solids of the body are now engaged in building granulations, while those capillaries, which in their natural state secrete the interstitial fluids during the process of ulceration, secrete pus. Burns and other surgical pathologists are of opinion, that when there are no granulations, perfect or imperfect, healthy or the contrary, there can be no ulceration. Ulceration is a restorative process, in which healthy flesh, or granulations, are secreted. Where there are no granulations, it is a "mere suppurating sur-

face." Although I concur in opinion with these gentlemen, still I will for the sake of custom and convenience continue the old nomenclature.

Ulcers are divided into healthy or simple, indolent, irritable, and phagedenic. The simple healthy ulcer is commonly the result of an abscess, and is met with in a sound constitution. Its characters are florid and pointed granulations, having an even surface, but slightly elevated above the surrounding skin, and covered by a matter of the colour and consistence of cream. By granulations, I mean those little eminences springing from the cellular tissue, by which the surface of an ulcer is covered. They present a reticulated structure when examined through a microscope. Their bases are broad, and they contract as they approach the surface, to about one-third of their original diameter. When the constitution is sound, and the body in a healthy condition, they spring up very rapidly. They evince a great disposition to unite one with another, and from this natural process we derive useful hints in their treatment.

When the solution of continuity is entirely filled up by red, and even granulations, secreting a yellowish pus, the process of cicatrization commences. A white, shining transparent film covers the surface of the sore. The *cutis vera* is first formed, the cuticle next, and the *rete mucosum* last of all. Thus we can account for the difference of color in a cicatrix which often exists so long. This is peculiarly the case with the negro. Sometimes indeed the *rete mucosum* is never regenerated.

Of all the remedies which have been proposed to cure ulcers not one deserves the name. Ulceration is a natural, restorative process, instituted to repair some injury. All that the surgeon can do is to assist the healthy action which is going on. A poultice at first will be found a very soothing and comfortable application. When the granulations have risen near the surface, the poultice should be removed; it relaxes and weakens the parts, and now does harm. Simple cerate, adhesive plaster, or dry lint may be substituted. An oval piece of dry lint may be applied to the centre of the sore. Sometimes the granulations become too luxuriant, and are said to be *fungous*, or are termed in common language *proud-flesh*. In such cases they may be compressed by the means just mentioned. When languid we must apply some stimulating application. Numerous ointments have been proposed to effect this. These greasy substances are very apt to irritate the sore, on account of their becoming rancid from the heat of the parts. I therefore, commonly prefer using the same articles in the form of washes. These may be applied on a piece of lint to the surface of the ulcer, and the whole covered by oiled silk to prevent evaporation. The black and yellow washes, solutions of the nitrate of silver, and sulphate of copper may be used for this purpose. Attention must be paid to the diet of the patient, as well as to his general health, and all stimulating drink and food must be forbidden. The part must also be kept at rest. I may mention that within a few years, in the London Hospitals, cold water has been found a very pleasant and excellent application to ulcers.

Sometimes, from bad treatment, or from impaired constitutional powers, the ulcer assumes an

indolent character, evincing an indisposition to heal. There are no granulations; the surface is flat and shining, glassy and semi-transparent. The edges are smooth, rounded, elevated, and protuberant, making the chasm in the flesh appear much deeper than in reality it is; for it, in fact, is but little below the level of the skin. Indolent ulcers occur generally in parts remote from the centre of the circulation, as the leg; and are most frequently met with in intemperate habits. Local means will effect but little, unless the constitution is attended to. You must first regulate this. A good pill to improve the secretions, and conduce towards this end, is the following:—

R. Extract. colocynth. comp. gr. xxiv.

Pil. hydrarg.

Pulv. rhei, *aa* gr. xij.

Ft. mass. et div. in pil. no. xii.

Sig. Two or three at night.

Where gastric derangement exists, as we often find in persons of luxurious habits of life, I have found no mixture so excellent as the following. Indeed, in several forms of dyspepsia, especially in those connected with irritation of that viscous, I look upon it as invaluable:

R. Extract. taraxici, 3j.

Potassæ tart. 3vj.

Sodæ bi-carb. 3j.

Tinct. rhei, f.3vi.

Aq. bullient, 0 j.

M. ft. infus.

Sig. A half a wine-glass full three times a day.

Place your patient in bed, elevate his limb, and apply a poultice. You must then employ stimulating applications. Of these there are a great number, and you will find it advantageous to be acquainted with, and employ perhaps all. It is very necessary to change frequently your applications in the treatment of all kinds of ulcers. An ulcer will do very well for some days under one application, which will then lose its effects, and you must resort to another, and another, until you succeed in accomplishing a cure. The fermenting poultice, made by mixing Indian meal and porter, and putting them before the fire to ferment; poultices containing the chloride of lime or soda; the black and yellow wash, and the solutions of the sulphate of copper or zinc, with a host of others, may be mentioned. A solution of nitric acid,—fifty drops to the pint of water,—is highly recommended by Sir Astley Cooper, in this form of ulcer. An excellent application to an indolent ulcer, and one which I frequently employ, consists of equal parts of bees-wax and Venice turpentine, melted together, and poured, when cooling, into the ulcer, and confined there by strips of adhesive plaster. So long, however, as the edges remain in the callous and undermined condition before mentioned, it is impossible to cure the ulcer. They must be removed by the knife or caustic. The method usually employed, is to apply over the ulcer a piece of adhesive plaster, cut to fit the sore, and then to burn off the edges with the caustic potash. A plan of treatment for indolent ulcers was proposed some years ago by Baynton. It consisted of the application of adhesive straps, encircling three-fourths of the leg, with holes cut in them to permit the passage of the matter. This plan sometimes suc-

ceeds very well, but I have seen it prove very injurious. Baynton says, that by adopting this method the necessity of confinement to bed is obviated, he allowing the patient to walk about. I never saw yet a case of ulcer where motion did not do harm. One variety of the indolent ulcer, and a very common form of the disease, is connected with an enlarged or varicose condition of the veins. This is the result of phlebitis, or inflammation of the veins, for in every case we find them preternaturally thickened; they are four times as thick, and often twice as long as natural. The veins are very tortuous, and return on themselves. The valves do not act, and the column of blood has nothing to sustain it. Ambrose Paré, and the old surgeons, were in the habit of removing the enlarged venous cluster, by the actual cautery. This was, of course, a very cruel and unnecessary procedure. Another practice is to cut down and apply a ligature to the vessel. This is a very dangerous operation, fatal phlebitis often following it. Sir Astley states, that he would, in his own case, rather have a ligature applied to his femoral artery, than have his saphena vein tied. Sir Benjamin Brodie proposes to divide the vein; for this purpose he introduces a narrow, slightly curved bladed bistoury with its cutting edge on the convex side, between the integument and vein, and turning the back to the former, cuts through the vessel. Reunion, however, is found to follow this operation, and the varicose condition to return. In the early stage, leeching along the course of the vein, aided by compression, is often sufficient to effect a cure. If the disease has existed for any time, an operation becomes necessary. The one I have been in the habit of performing, is that proposed originally by Dr. Hartshorne of this city. You cut down upon the vein, dissect out about two inches, and remove it, you then apply a compress above and below the wound, and confine the whole limb by a bandage. The first dressings are to be suffered to remain four or five days. I have now performed this operation fifteen times, and in but one instance did any bad effects follow. That patient had an attack of phlebitis, from which he recovered. The French surgeons have lately proposed a new operation for this affection; it consists in passing a needle through the vein and confining it there for several days by means of a ligature. I have tried it lately in a case of varicocele, and with success. On the same principle, Fricke, of Hamburg, passes a ligature through the vein, and permits it to remain in a sufficient length of time to excite the requisite inflammation for the obliteration of the vessel. Liston, and other English surgeons, apply caustic to that portion of the vein which is healthy, until inflammation occurs and its cavity is destroyed.

The next description of ulcers to which I shall direct your attention is the irritable ulcer. This may be recognised by the great pain it occasions, the jagged, irregular edges; the florid, unequal granulations, and the bloody, fetid and ichorous discharge. The constitutional symptoms too are often very severe and distressing. Pressure on the part occasions intense suffering; the weight even of a poultice will sometimes produce a great deal of pain. Various local applications have been recommended; among these, fomentations with

poppy heads will be found very soothing and serviceable. The mucilages of flax seed, slippery elm, and sassafras, you will also find very advantageous when inflammation exists; indeed, when this occurs to any extent, you must resort to leeching; your leeches must be applied around the ulcer, to the sound uninflamed skin. Sir Astley Cooper's anodyne lotion you will find, at times, a valuable application. We use it in the Pennsylvania Hospital with a great deal of success. It is composed of

R. Extract. opii, 3ss.  
Pulv. acac. 3iss.  
Aq. calcis, 3ivss.

M. ft. sol.

But the great secret in the treatment of every description of ulcer, as I have before told you, is to change constantly your applications; when you find one losing its effects, try another, and so on. In the treatment of indolent ulcers the greatest benefit is derived from the internal use of opium and calomel. Some surgeons are of opinion that the anodyne alone will answer, but my experience is in favour of the addition of the mercurial. I give one grain of opium and two of calomel twice or thrice a day. From the employment of this remedy I have derived the greatest benefit. When the character of the ulcer is changed, and the granulations begin to spring up, the local application of opium must be stopped, as it tends to deaden the parts, and prevent the healing process.

The last variety of ulcers of which I shall speak to-day, is the sloughing or phagedenic ulcer. The phagedenic ulcer prevails often to a great extent in hospitals. In the Pennsylvania Hospital, last winter, there must have been at least twenty cases. It often proves very fatal, attacking patients of all descriptions, causing a fatal termination to the slightest wound. When it attacks a part, the granulations lose their florid hue and become flabby; the parts swell, and an ichorous discharge is poured out. It is commonly connected with erysipelas. Some surgeons consider it as contagious. The constitution is severely implicated; the pulse can scarcely be felt; the countenance becomes sunken; the eyes are glassy; a cold sweat covers the whole body, and the patient rapidly sinks. Various means have been proposed to arrest this formidable malady. In the Pennsylvania Hospital the purgative plan has been found the most effectual, combined with the usual local means for the arrest of gangrene. Blisters have been highly lauded as a means of arresting hospital gangrene, but I have known repeatedly the parts on which the blister has been applied to slough, and thus aggravate the patient's condition. Removal to another ward will very often speedily put a stop to this affection.

#### CLINICAL REPORTS.

##### PENNSYLVANIA HOSPITAL.

[Reported by HENRY H. SMITH, M. D., resident Surgeon.]

*Case of Amputation at the Shoulder Joint, from extensive laceration in machinery.*

Walter L—, a black man, aged 29, was admitted early on the morning of November 17th,

1837, for a very bad compound fracture of the hand, fore arm, and arm. He was engaged in attending a steam-engine, for kneading dough, at a biscuit bakery, and whilst placing the dough under a heavy lever, by which the crackers were cut, stamped, &c., his left hand was drawn into the machinery up to the shoulder. The arm was terribly lacerated, being punched at regular distances from the fingers up to the shoulder; the bones of the hand and fore arm were broken into many pieces; humerus fractured in three places; the brachial artery divided, and bare to within two inches of the axilla. He had lost much blood immediately after the injury, but had no hemorrhage at the time of his admission, one hour and a half afterwards. The skin was torn from the chest for several inches, and from the neck to within one inch of the lower jaw; the head of the humerus dislocated, and the skin torn loose some distance on the back part of the chest. On his admission, the threads holding the arm together were divided within four inches of the axilla, the vessels tied, and stump dressed with dry lint. The patient was then put to bed; ordered tinct. opii gtt. lxxx., with a little wine and water. A consultation at 12 $\frac{1}{2}$ , P. M., determined on amputation at the shoulder joint. The man having reacted sufficiently, the operation was performed by DR. RANDOLPH in the presence of the Surgeons of the house, and several medical men. The artery was compressed above the clavicle; and the arm being much lacerated, the vessels were first dissected up and tied; the muscles on the top were divided by the catlin; the capsular ligament divided, and the head of the bone turned out. The muscles on the axilla were next divided, the smaller vessels tied, and a flap formed by bringing the deltoid, &c., to the side. The usual dressings were applied, and the patient put to bed; pulse good; little blood lost during the operation; diet, sago; ordered t. opii gtt. ix.

*Night.* Pulse very quick—considerably over 160; cold sweat; no hemorrhage; complains of little pain; ordered wine  $\frac{3}{4}$  iii. in sago; laud. gtt. 1., and hot tins to extremities.

*Nov. 19th.* Pulse fuller—165 in the minute; skin warm and pleasant; slept tolerably; ordered t. opii. gtt. xl., and same treatment.

*Night.* Pulse slower—about 130; skin warm and moist; laudanum repeated; continue wine, &c.

*Nov. 19th.* Great prostration; pulse quick and irregular; ordered hot egg-nogg, and stimulated very freely.

*Nov. 20th.* Died at 2, A. M., having never entirely recovered from the shock to his nervous system. There was no examination of the body.

*Case of Amputation of the Arm for a Compound Fracture of the Elbow Joint, ligatures removed in seven days.*

Hugh F—, aged 31 years, whilst engaged in quarrying near the city, was blown up by a charge, which exploded unexpectedly. His face, eyes, hands, arms, and legs were burnt, and the left elbow joint laid open by the ramming needle. He was seen shortly after by a physician, who removed portions of the olecranon, filled the orifice with lint, and dressed the arm with two straight splints. The next day he was brought to the city

and admitted into the Hospital on the 10th of April, eighteen hours after the accident. The face was studded with particles of powder, which had penetrated the cutis; the eyes were much inflamed, and filled with sand and powder, several pieces of which were driven into the sclerotica and cornea. The left elbow joint was opened extensively, the integuments torn, the olecranon removed, and the humerus fractured obliquely above the condyles, exciting inflammation, which had extended three inches above the joint. Extremities cold, pulse slow and feeble, tongue dry and red; says he is in the habit of drinking a pint of spirits daily. The eyes were well syringed, and washed with mucilage; cloths wrung out of the same were applied to the face, with poultices of flaxseed to the burns. The elbow joint was surrounded by a warm poultice, the arm placed in a curved angular splint, extending from the shoulder to the fingers, and loosely bandaged. Ordered wine and water every two hours, and tinct. opii gtt. cxx.

*April 11th.* Has rested well; face cleansing; tongue more moist; eyes clearer; sight uninjured; arm comfortable; inflammation extending upwards.

A consultation at 4, P. M., determined on immediate amputation, which was performed by DR. RANDOLPH, high up, but without being able to avoid the inflamed part. On turning back the flap, the integuments were found glued to the muscles. The usual dressings were applied, and an opiate administered. Notwithstanding the unfavourable nature of the case, the arm did remarkably well; the ligatures all came away by the seventh day; the wound united very readily, and no bad symptoms followed.

*May 2d.* Three weeks after the amputation the wound is nearly entirely closed, the eyes improving, and the patient able to walk about.

*List of Accidents, admitted into the Pennsylvania Hospital, from April 18th to May 2d, 1838.*

One case of contusion of the shoulder, from a fall; cupped, and arm kept quiet; discharged in ten days. One case of slight contusion of the back; discharged in three days. One case of fracture of the acromion scapulae, from the falling in of a bank of earth: dressed with clavicle apparatus. One slight lacerated wound of the hand, from a fall; dressed with adhesive plaster; afterwards poulticed, to cause suppuration and remove the dirt existing in the wound. One case of compound fracture of both bones of the leg, from an injury by the falling in of earth; dressed with fracture box and lint, wet with white of egg, so as to form an artificial scab; afterwards poulticed to promote removal of slough. One case of sprained ankle, caused by jumping from a height, dressed with fracture box, and lead water cloths; limb elevated. One case of lacerated wound of the scalp, caused by a fall from a cart; hair removed and wound united by adhesive plaster; since attacked with erysipelas and treated accordingly.

The punctured wound of the knee, reported in the last, has since been discharged, cured.

The lacerated finger was attacked by erysipelas and sloughed, the last phalanx was removed; at present healing.